



Mobility

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Convergence Brings New Opportunities

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"We have an incredible amount of people who work close to the customer.

Making them more productive is my No.1 priority. Wireless is going to be the key to us."

Jeffrey Immelt, Chairman, General Electric

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Telefonica Moviles/Celesta

" **5% improvement** in productivity and a payback period of **6.5 months**"

New York Stock Exchange

"If we turned off the handhelds, we'd have a real problem handling current volumes "

Tinker AirForce Base

"Up to **\$2M savings** from first deployment"

Schneider Children's Hospital

"We want this **mobile solution** in all our hospitals"

Jena University Hospital

"Saved up to **2 hours per day**"

Users Embracing Mobility

Mobility: Increasing productivity and reducing costs



Cap Gemini/BT industries

" Saved approx. **2.5 mil Euros/year** and paper replacement of approx. **1.2 million work orders**"

Chrysler

" [Now] there is **hardly any wait** for information or availability."

McDonalds

" Gather information and **transmit it directly** to our central database"

Sears

" Call volume has been **reduced by 80%** now that technicians can wirelessly place orders right from the Sears parts database. This alone is saving **millions of dollars** per year. "

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Convergence Requires Software Focus

What We Said Last Time

Right Once Run
Best on Intel Processors

With Industry, Enable
Mobility Solutions

What We Did

SW Tools to simplify multi-platform development

New Tools:

Intel Thread Checker 1.0 for Windows, VTune™ for Linux 1.0

New Releases:

VTune™ 7.0, Math Kernel Library 6.0

Coming in Q4:

VTune™ 7.1, VTune™ Linux 2.0, C++, Fortran 8.0 and IPP 4.0

Mobilized Software Initiative to accelerate
mobilized software adoption





What We Said in Fall IDF 2002...

Committed:

Accelerate Innovation Along Four Mobility Vectors

Drive Industry Involvement

Spur Growth Through Wireless Mobility



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What We Did...

Delivered:

Accelerate Innovation Along Four Mobility Vectors

90 New Designs in the first 5 months

Drive Industry Involvement

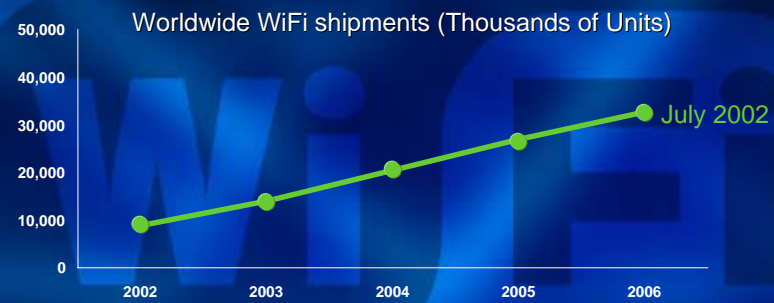
20,000 Verified Hotspots Worldwide, 15+ Companies in Extended Battery Life Working Group

Spur Growth Through Wireless Mobility

20% year-on-year notebook growth (IDC 8/03)



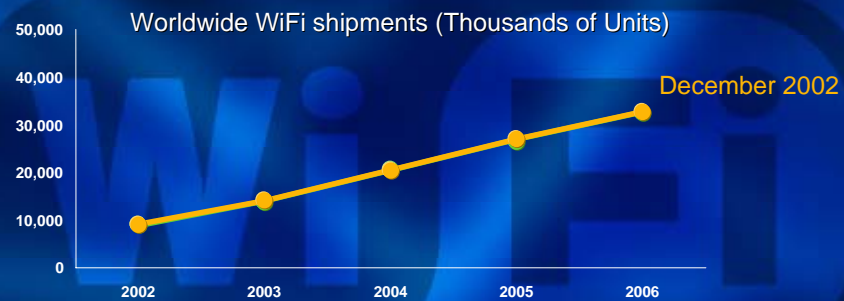
WiFi Estimates Rise ...



Source: InStat, 8/02

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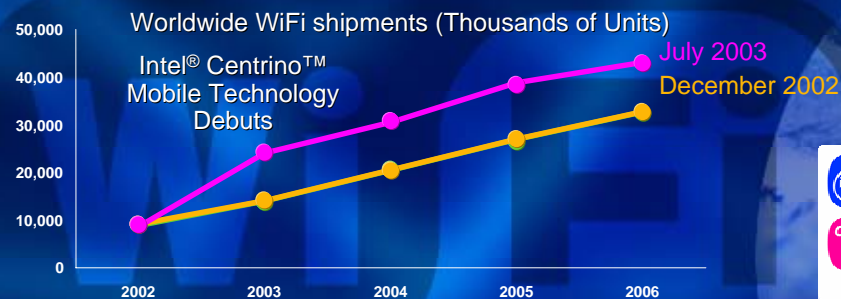
WiFi Estimates Rise ...



Source: InStat, 12/02

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WiFi Estimates Rise ...



“Mark March 12th, 2003
...Centrino’s introduction is not
just another product launch but
a milestone in the adaptation of
computers into our lives.”

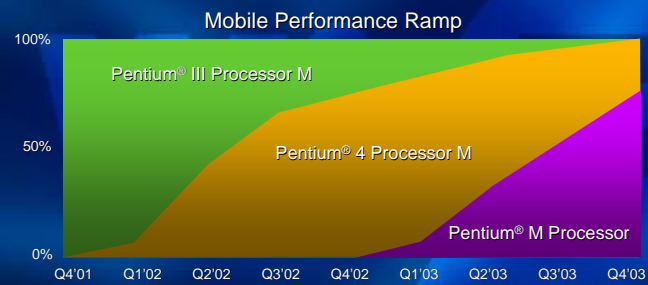
Aberdeen Group

Source: InStat, 7/03

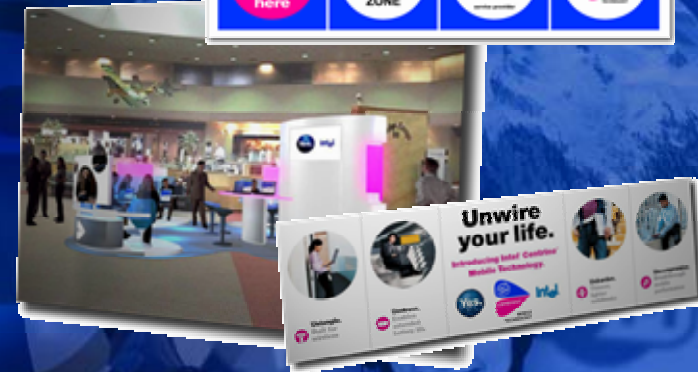
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WiFi Estimates Rise ...

... As Intel® Centrino™ Mobile Technology Debuts



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The background of the slide is a blue-tinted image of a construction site. It features several tall cranes and a worker in a white hard hat and safety vest, looking down at a device or plans. The scene is overlaid with a pattern of glowing blue lines that intersect to form a star-like shape in the center.

Industry Opportunity: Innovation Spurs New Adoption

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Mobility Is Dynamic

Advancing Intel® Centrino™ Mobile Technology



Chipset:

Lower Power, High performance, Platform-wide benefits

Processor:

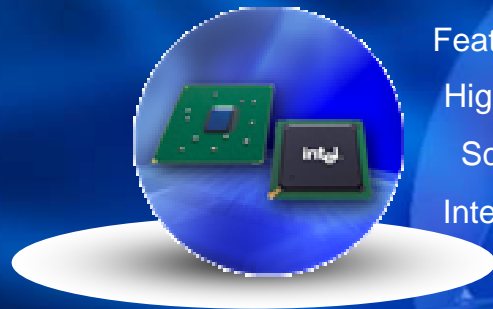
Next generation Performance, Power,
Process technology

Wireless:

Enhanced Security Software

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Launching Today: New Intel® 855GME Chipset

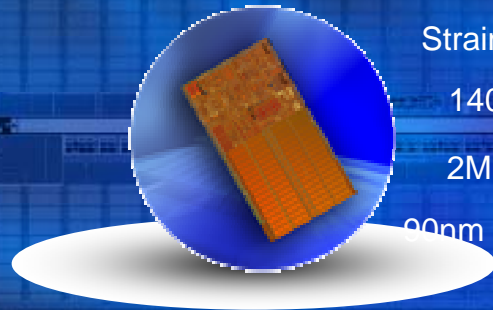


Features to enable lower power
High performance for graphics and memory
Scalable for pin-to-pin compatibility
Intel® Display Power Saving Technology

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Dothan:
Next Generation Process & Performance

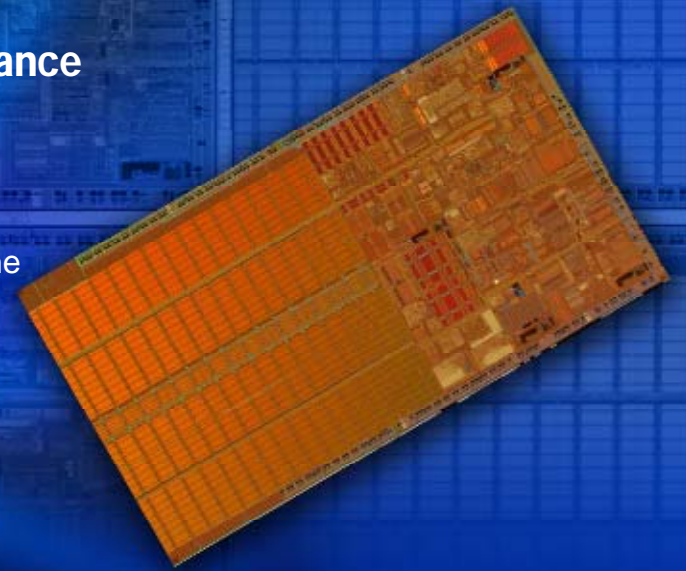


Strained Silicon

140 Million Transistors

2MB power efficient L2 Cache

90nm Process Technology



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Next Imperative: **Innovate for New Capabilities**

“Extended Mobile Access” Closed-Lid Computing

Simplified Network Selection

Location-based Computing

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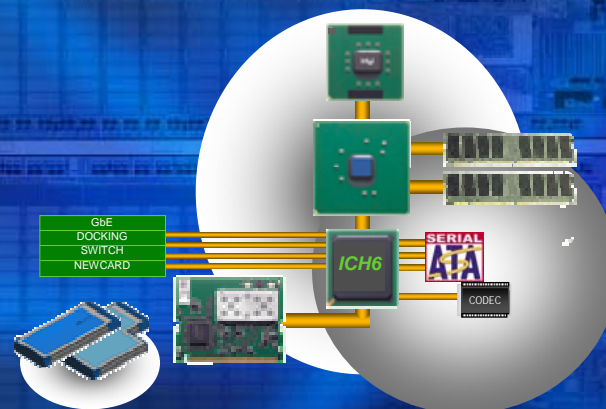
Sonoma: Mobile Platform 2H'04



Next Generation
Intel® Centrino™ Mobile Technology
Designed for High Performance
at Low Power

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Sonoma: Mobile Platform 2H'04



Designing for Azalia

Intel's next generation audio interface to replace AC '97
Power-optimized for mobility

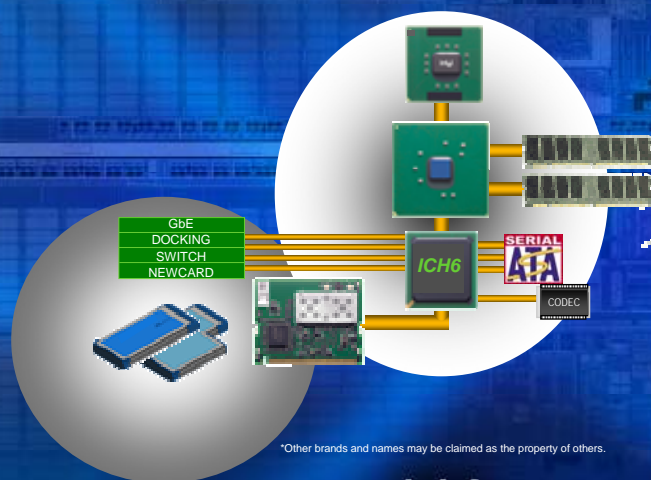
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Sonoma: Mobile Platform 2H'04

Designing for PCI Express*, ExpressCard*

Maximum bandwidth per pin reduces cost,
enables smaller form factors

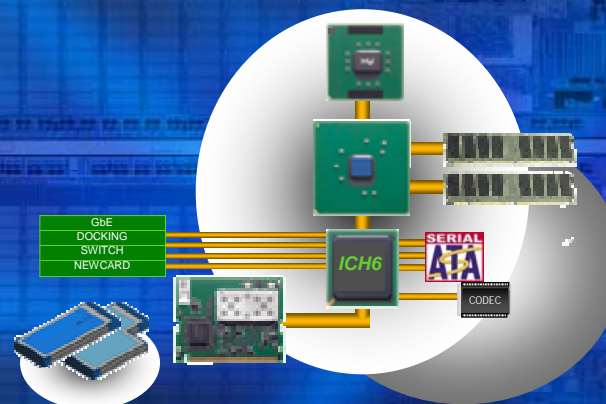
ExpressCard – low thermal limit solution for
next-generation expansion slot



*Other brands and names may be claimed as the property of others.

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Sonoma: Mobile Platform 2H'04



Designing for Serial ATA

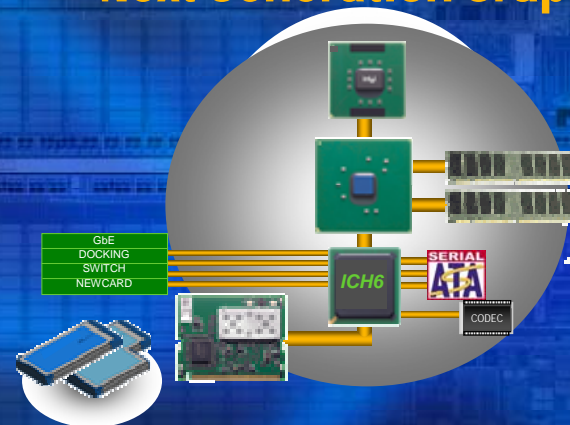
Next generation interface for ATA storage technology

Power managed for mobility

Board design flexibility & real estate savings

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Next Generation Graphics



New Graphics Core for
Next-generation
integrated Graphics

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Extended Battery Life Progress



Extended Battery Life Working Group membership exceeds 15 companies

Adopted 3 watt target for Thin/Light displays – zero in 2002, now 8 in 2003 and growing

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Opportunity for New Capabilities

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Keeping Mobile Cool: A Peek into Intel Mobile Labs



Peoples' Demands Always Increasing

New Usage Models Create New Design Challenges

Innovate for Performance/Power optimization

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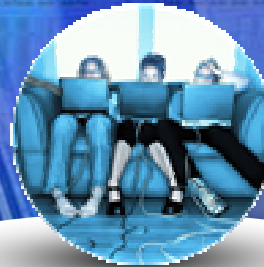


Our Opportunity

Intel® Centrino™ Mobile Technology is ramping strong

New wireless usage models drive growth

Sonoma platform is *the* 2004 innovation opportunity



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Applications Processor Intel® XScale™ Microarchitecture Processors

"In a major shift in the (PDA/handset) applications market, Intel grabbed the top spot in 2002."

IDC, June 2003



Intel Apps Processor Shipments

Power / Performance leader
Microprocessor Report Analysts' Choice Award

PDA Momentum

Pocket PC, Linux, Palm >10 carriers delivering Intel solutions

Intel's Total PDA Market Segment*

- 0% MSS 2000
- 35% end of Q1'03



Market Requirements In Handsets

Now and Future

Past Promise

Processor

Complete Solution with

- Compelling Applications
- High Resolution Cameras
- Low Power consumption
- High Performance



Solutions in the Market

Applications

- SMS/MMS
- K-Java
- Voice record/playback
- Productivity SW
- Audio/Video playback (MP3, MPEG4)
- Speech Recognition
- Instant Messaging
- Games

Camera

- Image capture/Viewer
- Video capture/playback



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中国移动通信
CHINA MOBILE

Next Generation Intel® XScale™ Technologies

Code Named Bulverde

Intel® Wireless MMX™ technology

Intel® Quick Capture technology

Intel® Wireless SpeedStep™ technology

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Next Generation Intel® XScale™ Technologies

Code Named Bulverde

Intel® Wireless MMX™ technology

- Delivers fast multimedia performance with less power
- Simplifies porting of PC applications to wireless handhelds

Intel® Quick Capture technology

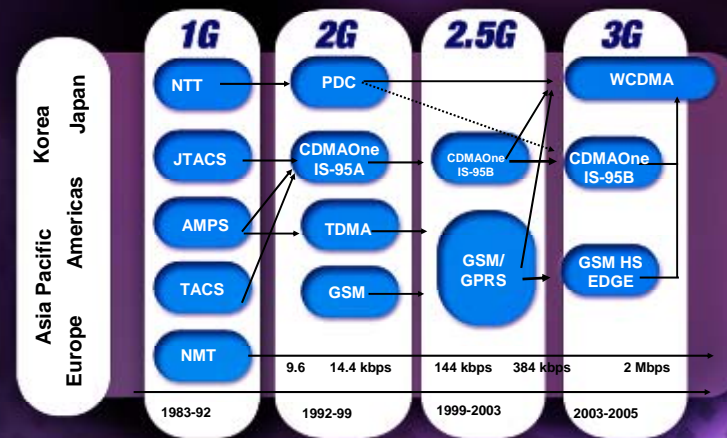
- Full motion video up to 4 M-pixel stills

Intel® Wireless SpeedStep™ technology

- Dynamically optimizes power and performance



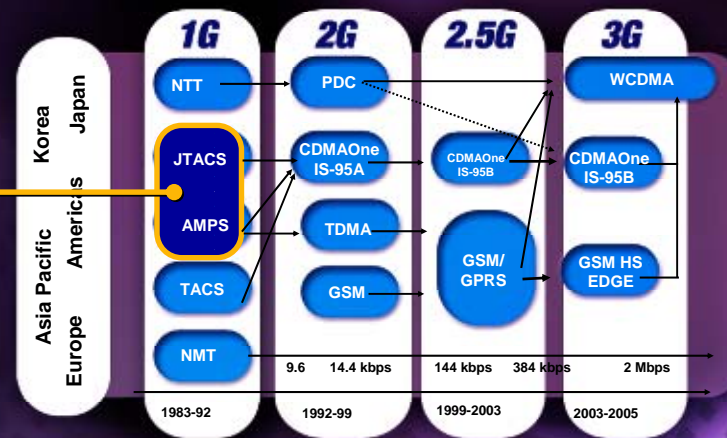
Intel's Cellular Roadmap



Time Frame of Initial Deployment

Intel's Cellular Roadmap

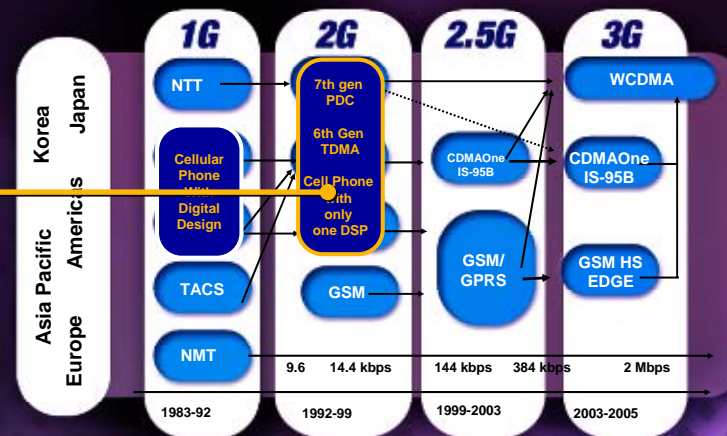
Cellular Phone With Digital Design



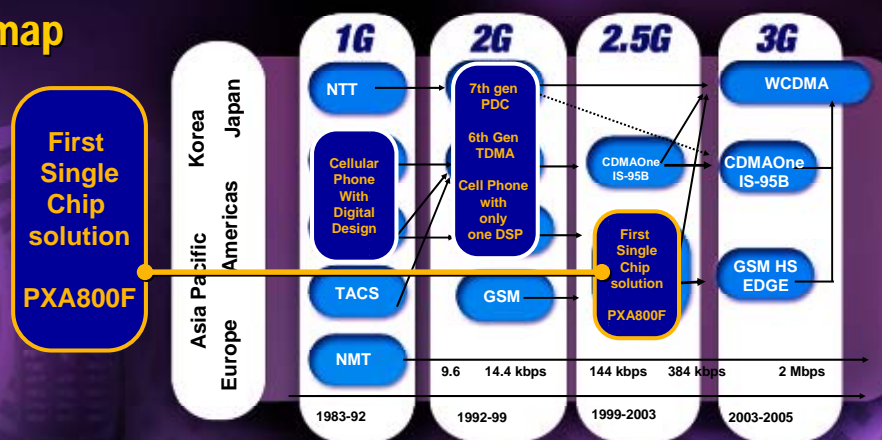
Intel's Cellular Roadmap

7th gen PDC
6th Gen TDMA

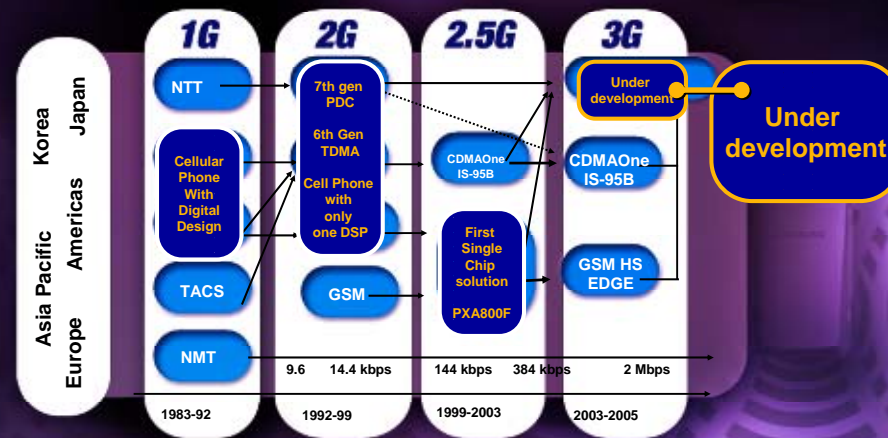
Cell Phone with only one DSP



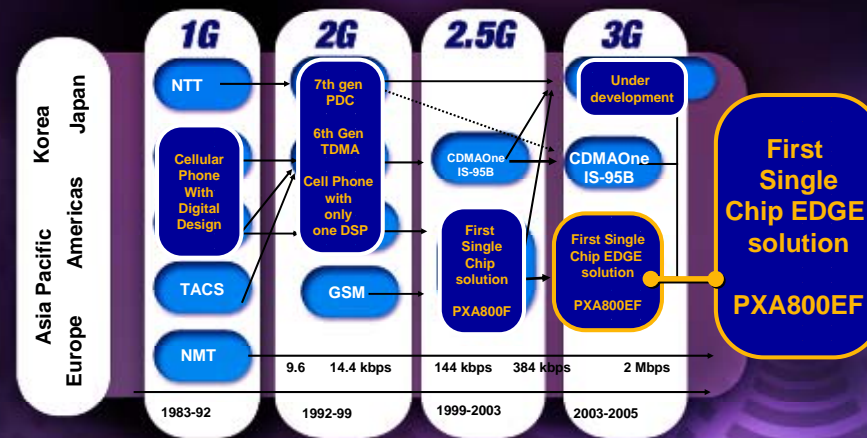
Intel's Cellular Roadmap



Intel's Cellular Roadmap



Intel's Cellular Roadmap





Intel® PXA800EF Cellular Processor

- Delivering complete roadmap
- First Single chip solution for EDGE
- Scalable Solution



Summary

- Utilize Intel® XScale™ technology leadership
- Extend your opportunities with Intel's Communications Roadmap



Successful products are solutions

intel[®]